

**CITY OF NEWTON
PURCHASING DEPARTMENT**

CONTRACT FOR DEPARTMENT PUBLIC WORKS

**PROJECT MANUAL:
SUPPLY & DELIVER EXTRA LARGE CONSTRUCTION
UTILITY TRUCK FOR WATER DEPARTMENT
*INVITATION FOR BID #15-28***

Bid Opening Date: October 30, 2014 at 10:30 a.m.

**OCTOBER 2014
Setti D. Warren, Mayor**

**CITY OF NEWTON
PURCHASING DEPARTMENT
INVITATION FOR BID No. #15-28**

The City of Newton invites sealed bids from vendors (contractors) to:

SUPPLY & DELIVER EXTRA LARGE CONSTRUCTION UTILITY TRUCK FOR WATER DEPARTMENT

Bids will be received until: **10:30 a.m., Thursday, October 30, 2014***
at the Purchasing Department, Room 204, Newton City Hall, 1000 Commonwealth Avenue, Newton, MA 02459. Bids will not be accepted nor may submitted bids be corrected, modified or withdrawn after the deadline for bids. Following the deadline for bids, all bids received within the time specified will be publicly opened and read aloud.

Contract Documents will be available online at : www.newtonma.gov/bids or for pickup at the Purchasing Department after **10:00 a.m., October 16, 2014.***

There will be no charge for contract documents. Bid surety is not required with this bid.

The City is seeking bids for a Utility Vehicle, including Required Additional Features, for the Department of Public Works (DPW) as set forth in the SPECIFICATION SHEETS set forth at pp. 17-32 below. The said vehicle shall be delivered by the contractor within approximately **60 business days** following notice of award. **This will be a one-time purchase. The winning contractor will receive a Purchase Order for this item.**

It is contractor's responsibility to ensure its bid is submitted by the deadline for acceptance. Any bid received after the time for receipt established in this Invitation For Bids (IFB) will be returned unopened. All bids are subject to the provisions of M.G.L. Chapter 30B. Award shall be made to lowest responsive and responsible bidder.

"Equal" - An item equal to that named or described in the specifications of the contract may be furnished by the Vendor and the naming of any commercial name, trademark or other identification shall not be construed to exclude any item or manufacturer not mentioned by name or as limiting competition but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, at time of bid, use or fabrication of such items. Subject to the provisions of M.G.L., Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Vendor's expense. All directions, specifications and recommendations by manufacturers for installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Vendor.

All bids shall be submitted as one ORIGINAL and one COPY.

All City of Newton bids are available on the City's web site, www.newtonma.gov/bids, Current Bids. It is the sole responsibility of the contractor downloading these bids to ensure it has received any and all addenda prior to the bid opening. Addenda will be available online within the original bid document as well as a separate file. If you download bids from the internet site and would like to make it known that your company has done so, you may fax the Purchasing Department (617) 796-1227 or email purchasing@newtonma.gov with your NAME, ADDRESS, PHONE, FAX AND INVITATION FOR BID NUMBER.

The City will reject any and all bids in accordance with the above referenced General Laws. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all bids (in whole or in part) if it be in the public interest to do so.

CITY OF NEWTON



Nicholas Read

Chief Procurement Officer

October 16, 2014

***Please Note: Date has changed from what was originally advertised.**

CITY OF NEWTON
DEPARTMENT OF PURCHASING
INSTRUCTIONS TO BIDDERS

ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that the Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specifications (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
- 1.2 Failure to so examine the Contract Documents will not relieve any Bidder from any obligation under the bid as submitted.

ARTICLE 2 - REQUEST FOR INTERPRETATION

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at purchasing@newtonma.gov or via facsimile (617) 796-1227. The City will only answer such requests if received by **Friday, October 24, 2014 at 12:00 noon**. In the event that the bid opening date is changed, the deadline for informational requests may also change as provided in an addendum issued by the City.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by addendum which will become part of the Contract Documents. The City will not be held accountable for any oral communication.
- 2.4 Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Receipt of all addenda issued must be acknowledged in the Bid Form. **YOUR FAILURE TO ACKNOWLEDGE ALL ADDENDA MAY RESULT IN YOUR BID BEING REJECTED AS NON-RESPONSIVE.**
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at www.newtonma.gov/bids.
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the procurement process.
- 2.7 Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes itself known to the Purchasing Department, at purchasing@newtonma.gov or via facsimile (617) 796-1227, it shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and **INVITATION FOR BID #15-28**.

ARTICLE 3 - MBE PARTICIPATION

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: www.newtonma.gov/purchasing.

ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on the "Bid Form #15-28" as appropriate, furnished by the City.
- 4.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 The Bid shall be enclosed in a sealed envelope with the following plainly marked on the outside:
 - * GENERAL BID FOR: **#15-28**
 - * NAME OF PROJECT: **Supply and Deliver Extra Large Construction Utility Truck for Water Department**
 - * BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER
- 4.5 Date and time for receipt of bids is set forth in the Invitation for Bids.
- 4.6 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.7 Bids shall be submitted with one **original** and one **copy**.

ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge alternates (if any) in Section C on the Bid Form.
- 5.2 In the event an alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

ARTICLE 6 - WITHDRAWAL OF BIDS

- 6.1 Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids may be withdrawn within sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of the bids.

ARTICLE 7 - CONTRACT AWARD

- 7.1 The City is soliciting a price for an Extra Large Construction Truck meeting all the specifications set forth at pp. 17-32 below. It is the City's intent to award one (1) contract to responsive and responsible bidder offering the lowest price. A contract will be awarded within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.
- 7.2 The City reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.

- 7.3 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- 7.4 As used herein, the term "lowest responsible and responsive Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.
- 7.5 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.6 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

ARTICLE 8 - TAXES

- 8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.
- 8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

ARTICLE 9 – PROPRIETARY SPECIFICATIONS

- 9.1 The City may have used a proprietary specification to describe the supply for which is soliciting bids. Such specifications are permitted under M.G.L. c. 30B, §14, provided that the Chief Procurement Officer has prepared a written statement that no other manner of description suffices and the justification therefor.
- 9.2 The required determination and justification have been duly prepared, and a copy may be requested in accordance with the Massachusetts Public Records Law, M.G.L. c. 66, §10.

END OF SECTION

CITY OF NEWTON

DEPARTMENT OF PURCHASING

BID FORM #15-28

- A. The undersigned proposes to supply and deliver the materials and/or equipment and/or supplies specified below in full accordance with the IFB supplied by the City of Newton entitled:

SUPPLY & DELIVER EXTRA LARGE CONSTRUCTION UTILITY TRUCK FOR WATER DEPARTMENT

for the contract price(s) specified below, subject to additions and deduction according to the terms of the specifications.

- B. This bid includes addenda number(s) _____, _____, _____, _____,

- C. The Bidder proposes to supply and deliver an Extra Large Construction Utility Truck for Water Department according to the Specifications as listed in pages 17 through 32 below at the following price, FOB delivered to Newton, MA:

**SUPPLY & DELIVER AN EXTRA LARGE CONSTRUCTION UTILITY TRUCK FOR WATER DEPARTMENT
MEETING THE SPECIFICATIONS ATTACHED HERETO (pp. 17-32)**

TOTAL PRICE \$ _____

AND (Price In Words) _____

COMPANY: _____

State Delivery Time (number of calendar days after receipt of order): _____

- D. The undersigned has completed and submits herewith the following documents:

- ☐ Signed Bid Form, 2 pages
- ☐ Bidder's Qualification s and References Form, 2 pages
- ☐ Certificate of Non-Collusion, 1 page
- ☐ Debarment Letter, 1 page
- ☐ IRS Form W-9, 1 page
- ☐ Certification of Tax Compliance, 1 page

- E. Prompt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. Payments may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Discounts will not be considered in determining the lowest responsible bidder.

Prompt Payment Discount _____% _____ Days

Prompt Payment Discount _____% _____ Days

Prompt Payment Discount _____% _____ Days

- F.** The undersigned agrees that, if selected as contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the City of Newton, execute a contract in accordance with the terms of this bid. The undersigned hereby certifies that s/he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that's/he will comply fully with all laws and regulations applicable to awards made subject to M.G.L. Chapter 30B. The successful bidder will be required to furnish a Performance Bond each in the amount of 100% of the contract total.

The undersigned further certifies under the penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this section the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from public contracting or subcontracting in the Commonwealth under the provisions of M.G.L. Chapter 29, Section 29F or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date _____
(Name of Bidder)

BY: _____
(Printed Name and Title of Signatory)

(Business Address)

(City, State Zip)

(Telephone & FAX)

(E-mail address)

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; if an individual, give residential address if different from business address; and, if operating as a d/b/a give full legal identity. Attach additional pages as necessary.

END OF SECTION

CITY OF NEWTON

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

1. FIRM NAME: _____
2. WHEN ORGANIZED: _____
3. INCORPORATED? ____ YES ____ NO DATE AND STATE OF INCORPORATION: _____
4. IS YOUR BUSINESS A **MBE**? ____ YES ____ NO **WBE**? ____ YES ____ NO or **MWBE**? ____ YES ____ NO
- * 5. LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPATED DATE OF COMPLETION:

- * 6. HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU?
____ YES ____ NO
IF YES, WHERE AND WHY?

- * 7. HAVE YOU EVER DEFAULTED ON A CONTRACT? ____ YES ____ NO
IF YES, PROVIDE DETAILS.

- * 8. LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:

- * 9. IN THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING CONTRACTS COMPLETED BY YOUR FIRM SIMILAR IN NATURE TO THE PROJECT BEING BID. A MINIMUM OF FOUR (4) CONTRACTS SHALL BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED, BUT NOT MANDATORY.

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____

DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

10. The undersigned certifies that the information contained herein is complete and accurate and hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City in verification of the recitals comprising this statement of Bidder's qualifications and experience.

DATE: _____ BIDDER: _____

SIGNATURE: _____

PRINTED NAME: _____ TITLE: _____

END OF SECTION

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee club, or other organization, entity, or group or individuals.

(Signature of individual)

Name of Business

City of Newton



Mayor
Setti D. Warren

Purchasing Department
Nicholas Read & Chief Procurement Officer
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449
purchasing@newtonma.gov

Telephone
(617) 796-1220
Fax:
(617) 796-1227
TDD/TTY
(617) 796-1089

Date

Vendor

Re: Debarment Letter for Invitation For Bid #15-28

As a potential vendor on the above contract, the City requires that you provide a debarment/suspension certification indicating that you are in compliance with the below Federal Executive Order. Certification can be done by completing and signing this form.

Debarment:

Federal Executive Order (E.O.) 12549 “Debarment and Suspension“ requires that all contractors receiving individual awards, using federal funds, and all sub-recipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency from doing business with the Federal Government.

I hereby certify under pains and penalties of perjury that neither I nor any principal(s) of the Company identified below is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

____ (Name)
____ (Company)
____ (Address)
____ (Address)
PHONE _____ FAX _____
EMAIL _____

____ Signature

____ Date

If you have questions, please contact Nicholas Read, Chief Procurement Officer at (617) 796-1220.

**Request for Taxpayer
Identification Number and Certification**

Give form to the
requester. Do not
send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ -----
☐ Other (see instructions) ▶

X Exempt
payee

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number

or

Employer identification number

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

**Sign
Here**

Signature of
U.S. person ▶

Date ▶

Name

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

CITY OF NEWTON, MASSACHUSETTS

PURCHASING DEPARTMENT

GENERAL TERMS AND CONDITIONS

1. The right is reserved to reject any and all bids, to waive informalities, and to make award as may be determined to be in the best interest of the City of Newton.
2. Prices quoted must include delivery to the City, as specified on the Purchase Order.
3. No charges will be allowed for packing, crating, freight, Express or cartage unless specifically stated and included in the bid.
4. The award to the successful bidder may be canceled if successful bidder shall fail to prosecute the work with promptness and diligence.
5. Time in connection with discount offered will be computed from the date of delivery to the City, as specified on purchase order, or from date correct invoice is received by the City, if the latter date is later than the date of delivery.
6. The successful bidder shall replace, repair or make good, without cost to the City, any defects or faults arising within one (1) year after date of acceptance of articles furnished hereunder (acceptance not to be unreasonably delayed) resulting from imperfect or defective work done or materials furnished by the Seller.
7. The Seller shall indemnify and save harmless the City and all persons acting for on behalf of it from all suits and claims against them, or any of them, arising from or occasioned by the use of any material, equipment or apparatus, or any part thereof, which infringes or is alleged to infringe on any patent rights. In case such material, equipment or apparatus, or any part thereof, in any such suit is held to constitute infringement, the Seller, within a reasonable time, will at its expense, and as the City may elect, replace such material, equipment or apparatus with non-infringing material, equipment or apparatus, or remove the material, equipment or apparatus, and refund the sums paid therefor.
8. The successful bidder shall comply with all applicable Federal State and Local laws and regulations.
9. Purchases made by the City are exempt from Federal excise taxes and bid prices must exclude any such taxes. Tax exemption certificates will be furnished upon request.
10. If so stated in the Invitation For Bid the successful bidder will be required to furnish a performance and/or a labor and material payment bond, in an amount, in a form and with a surety satisfactory to the City. The bidder shall be responsible for the cost of the bond(s).
11. If the Invitation for Bids requires bid surety, this surety shall be in the form of a cash, bid bond, cashier's check, treasurer's check, or certified check on a responsible bank, payable to the City of Newton, and must be filed with the original bid in the Office of the Chief Procurement Officer. Failure to do so will lead to rejection of bid. The bid surety will be returned to the successful bidder within seven (7) days execution of awarded, and approval by the City of performance and/or payment bond(s). In case of default, the bid surety shall be forfeited to the City.
12. Verbal orders are not binding on the City and deliveries made or work done without formal Purchase Order or Contract are at the risk of the Seller or Contractor and may result in an unenforceable claim.
13. The Seller shall agree to indemnify, defend and hold the City harmless from any and all claims arising out of the performance of this contract.
14. "Equality - An item equal to that named or described in the specifications of the contract may be furnished by the Vendor and the naming of any commercial name, trademark or other identification shall not be construed to exclude any item or manufacturer not mentioned by name or as limiting competition but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications. The name and identification of all materials other than the one specifically named shall be submitted to the

City in writing for approval, prior to purchase, use or fabrication of such items. Subject to the provisions of M.G.L., Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Vendor's expense. All directions, specifications and recommendations by manufacturers for installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Vendor.

For the use of material other than the one specified, the Vendor shall assume the cost of and responsibility for satisfactorily accomplishing all changes in the work as shown. If no manufacturer is named, the Vendor shall submit the product he intends to use for approval of the City.

Except as otherwise provided for by the provisions of M.G.L., Ch. 30, Sec. 39J, the Vendor shall not have any right of appeal from the decision of the City condemning any materials furnished if the Vendor fails to obtain the approval for substitution under this clause. If any substitution is more costly, the Vendor shall pay for such costs."

15. Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton, dated July 1995 Applicable to all contract in excess of \$10,000.00 A copy of this plan is on file at the City of Newton, Purchasing Dept. This paragraph applies to City of Newton purchases only.
16. Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan dated December 1999 is applicable to all City of Newton contracts for materials and supplies. A copy of this plan may be obtained from the Purchasing Department.
17. Right To Know:

Any vendor who receives an order or orders resulting from this invitation agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to M.G.L., Ch. 111F, SS8, 9 and 10 and the regulations contained in 441 CMR SS 21.06 when deliveries are made. The vendor agrees to deliver all containers properly labeled pursuant to M.G.L. Ch. 111F, SS 7 and the regulations contained in 441 CMR SS 21.05. Failure to submit an MSDS and/or label on each container will place the vendor in noncompliance with the purchase order. Failure to furnish MSDSs and/or labels on each container may result in civil or criminal penalties, including bid debarment and action to prevent the vendor from selling said substances or mixtures containing said substances within the Commonwealth. All vendors furnishing substances or mixtures subject to Chapter 111F of the M.G.L. are cautioned to obtain and read the law and rules and regulations referred to above. Copies can be obtained from the State House Book Store, Secretary of State, State House, Room 117, Boston, MA 02133, (617-727-2834) for \$2.00 plus \$.65 postage.

**FAILURE TO COMPLY WITH THESE TERMS AND CONDITIONS COULD RESULT IN THE
CANCELLATION OF YOUR CONTRACT.**

CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

**Signature of Individual
or Corporate Contractor (Mandatory)

Print Name:_____

By: _____
Corporate Officer
(Mandatory, if applicable)

Print Name:_____

*** Contractor's Social Security Number
(Voluntary) or Federal Identification Number

Date: _____

* The provision in this Certification relating to child support applies only when the Contractor is an individual.

** Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

*** Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

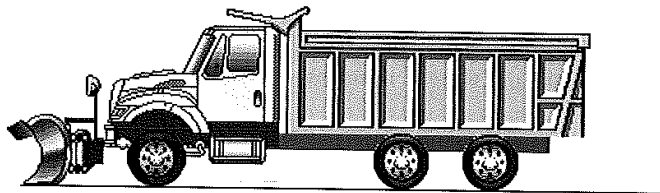
CITY OF NEWTON

DEPARTMENT OF PUBLIC WORKS

**SUPPLY & DELIVER EXTRA LARGE CONSTRUCTION UTILITY TRUCK
FOR WATER DEPARTMENT**

SPECIFICATIONS

WATER DEPT. 10 WHEELER



Model Profile
2015 7500 SFA 6X4 (SF537)

APPLICATION:	Front Plow No Spreader
MISSION:	Requested GVWR: 64000. Calc. GVWR: 64000 Calc. Start / Grade Ability: 19.30% / 2.03% @ 55 MPH Calc. Geared Speed: 68.6 MPH
FUEL ECONOMY:	7.31 MPG @ 55 MPH
DIMENSION:	Wheelbase: 177.00, CA: 102.00, Axle to Frame: 63.00
ENGINE, DIESEL:	{Navistar N10} EPA 10, SCR, 350 HP @ 2000 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 350 Peak HP (Max)
TRANSMISSION, AUTOMATIC:	{Allison 3000_RDS_P} 5th Generation Controls; Close Ratio, 6-Speed, With Double Overdrive; On/Off.Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.
CLUTCH:	Omit Item (Clutch & Control)
AXLE, FRONT NON-DRIVING:	{Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity
AXLE, REAR, TANDEM:	{Meritor RT-46-164EH} Single Reduction, Standard Width, 46,000-lb Capacity, With Driver Controlled Locking Differential in Forward Rear and Rear-Rear Axle and 200 Wheel Ends Gear Ratio: 6.14
CAB:	Conventional
TIRE, FRONT:	(2) 315/80R22.5 G751 MSA DURASEAL (GOODYEAR) 484 rev/mile, load range L, 20 ply
TIRE, REAR:	(8) 12R22.5 G622 RSD (GOODYEAR) 482 rev/mile, load range H, 16 ply
SUSPENSION, REAR, TANDEM:	{Hendrickson HMX-460-54} Walking Beam Type 54" Axle Spacing; 46,000-lb Capacity, With Rubber End Bushings, Transverse Torque Rods, Less Shock Absorbers
PAINT:	Cab schematic 100GM Location 1: 4641, Yellow (Custom) Chassis schematic N/A

Description

Base Chassis, Model 7500 SFA 6X4 with 177.00 Wheelbase, 102.00 CA, and 63.00 Axle to Frame.

FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.433" (276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL

BUMPER, FRONT Steel, Swept Back

Includes

: BUMPER, FRONT Powder Coated Gray (Argent) Color

FRAME EXTENSION, FRONT Integral; 20" In Front of Grille

WHEELBASE RANGE 177" (450cm) Through and Including 226" (575cm)

AXLE, FRONT NON-DRIVING {Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity

Notes

: The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.

SHOCK ABSORBERS, FRONT

SUSPENSION, FRONT, SPRING Multileaf, Shackle Type; 18,000-lb Capacity; Less Shock Absorbers

Includes

: SPRING PINS Rubber Bushings, Maintenance-Free

Notes

: The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.

SPRINGS, FRONT AUXILIARY Air Bag, Right Side Only, Driver Control

BRAKE SYSTEM, AIR Dual System for Straight Truck Applications

Includes

: BRAKE LINES Color and Size Coded Nylon

: DRAIN VALVE Twist-Type

: DUST SHIELDS, FRONT BRAKE

: DUST SHIELDS, REAR BRAKE

: GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster

: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel

: PARKING BRAKE VALVE For Truck

: QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4

: SLACK ADJUSTERS, FRONT Automatic

: SLACK ADJUSTERS, REAR Automatic

: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4

Notes

: Rear Axle is Limited to 46,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Standard Rear Air Cam Brakes Regardless of Axle /Suspension Ordered.

BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 SqIn Long Stroke Brake Chambers

Notes

: The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.

TRAILER CONNECTIONS Four-Wheel, With Hand Control Valve and Tractor Protection Valve, for Straight Truck

DRAIN VALVE {Bendix DV-2} Automatic; With Heater; for Air Tank

Includes

: DRAIN VALVE Mounted in Wet Tank

INTERNATIONAL®**Vehicle Specifications
2015 7500 SFA 6X4 (SF537)****August 11, 2014****Description****BRAKE SHOES, REAR Cast****Notes**

: Provides Rear Axle GAWR Up to 52,000-Lb.

: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.

AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)**AIR DRYER {Bendix AD-9} With Heater****Includes**

: AIR DRYER LOCATION Inside Left Rail, Back of Cab

BRAKE CHAMBERS, FRONT AXLE {Haldex} 24 SqIn**BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake****Includes**

: BRAKE CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BRAKES: All 4x2, 4x4; WITH TRACTOR BRAKES: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb.

: BRAKE CHAMBERS, SPRING (4) Rear Parking; WITH TRUCK BRAKES: All 6x4, 6x6; WITH TRACTOR BRAKES: 6x4 & 6x6 with Rear Tandem Axles 46,000-lb. or Greater or GVWR of 54,000-lb. or Greater

BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake**Notes**

: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.

AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity**STEERING COLUMN Tilt****STEERING WHEEL 2-Spoke, 18" Diam., Black****STEERING GEAR (2) {Sheppard M-100/M-80} Dual Power****EXHAUST SYSTEM Switchback Horizontal Aftertreatment Device, Frame Mounted Right Side Under Cab; Includes Single Vertical Tail Pipe, Frame Mounted Right Side Back of Cab****ELECTRICAL SYSTEM 12-Volt, Standard Equipment****Includes**

: BATTERY BOX Steel with Plastic Lid

: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab

: FUSES, ELECTRICAL SAE Blade-Type

: HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover

: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever

: HEADLIGHTS (2) Sealed Beam, Round, with Chrome Plated Bezels

: JUMP START STUD Located on Positive Terminal of Outermost Battery

: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light

: RUNNING LIGHT (2) Daytime, Included With Headlights

: STARTER SWITCH Electric, Key Operated

: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector

: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature

: TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted

: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever

: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted

: WIRING, CHASSIS Color Coded and Continuously Numbered

CIGAR LIGHTER Includes Ash Cup**ALTERNATOR {Leece-Neville AV160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense**

INTERNATIONAL®**Vehicle Specifications
2015 7500 SFA 6X4 (SF537)****August 11, 2014****Description**

BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn

BATTERY SYSTEM {International} Maintenance-Free, (3) 12-Volt 1950CCA Total

2-WAY RADIO Wiring Effects; Wiring With 20 Amp Fuse Protection, Includes Ignition Wire With 5 Amp Fuse, Wire Ends Heat Shrink and 10' Coil Taped to Base Harness

RADIO AM/FM/WB/Clock/3MM Auxiliary Input, with Multiple Speakers

AUXILIARY HARNESS 3.0' for Auxiliary Front Head Lights and Turn Signals for Front Plow Applications

TRAILER CONNECTION SOCKET 7-Way; Mounted at rear of Frame, Wired for Turn Signals Combined With Stop, Compatible With Trailers That Use Combined Stop, Tail, Turn Lamps

SWITCH, AUXILIARY Accessory Control; for Wiring in Roof, With Maximum of 20 amp Load With Switches In Instrument Panel

HORN, ELECTRIC Disc Style

BATTERY BOX Steel With Plastic Cover, 18" Wide, 2, 3, or 4 Battery Capacity, Mounted Right Side Back of Cab

SWITCH, BODY CIRCUITS, MID for Bodybuilder, 6 Momentary Switches in Instrument Panel; One Power Module with 6 Channels, 20 Amp Max. Per Channel, 80 Amp Max Output, Switches Control Power Module Through Multiplex Wiring, Mounted in Cab Behind Driver Seat

HORN, AIR Black, Single Trumpet, Air Solenoid Operated

WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time

TURN SIGNALS, FRONT Dual Face, Amber/Red, Mounted on Top of Fender, Used With Standard Flush Mounted Front Turn Signal, Side Marker Lamps, Parking Lights and Reflectors

CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade

ENGINE SHUTDOWN Automatic; With 30 Second Delay, With International Engines

TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights

HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on

STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; less Thermal Over-Crank Protection

INDICATOR, LOW COOLANT LEVEL With Audible Alarm

ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, With Ignition "OFF" and any Door Opened

CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses

HOOD, HATCH (01) for Servicing

INSULATION, UNDER HOOD for Sound Abatement

GRILLE Stationary, Chrome

INSULATION, SPLASH PANELS for Sound Abatement

FRONT END Tilting, Fiberglass, With Three Piece Construction; for 2007 & 2010 Emissions

CHASSIS COATING Corrosion Resistant Primer Coating for Single Frame Rails

PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes

: PAINT SCHEMATIC ID LETTERS "GM"

PAINT TYPE Base Coat/Clear Coat, 1-2 Tone

Description

PAINT CLASS Single Custom Color

PROMOTIONAL PACKAGE Government and Municipal Silver Package; Two Year Limited Subscription of On-Command Service Information (Formerly Fleet ISIS), and On-Command Parts Information (Formerly Fleet Parts Catalog), Requires Specific Feature Combinations

CLUTCH Omit Item (Clutch & Control)

PTO EFFECTS, ENGINE FRONT Less PTO Unit, Includes Adapter Plate on Engine Front Mounted

ENGINE, DIESEL {Navistar N10} EPA 10, SCR, 350 HP @ 2000 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 350 Peak HP (Max)

Includes

: AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)
 : ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/-40 Degrees C; for MaxxForce and Navistar Engines
 : COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control
 : CRUISE CONTROL Electronic; Controls Integral to Steering Wheel
 : ENGINE OIL DRAIN PLUG Magnetic
 : ENGINE SHUTDOWN Electric, Key Operated
 : FUEL FILTER Included with Fuel/Water Separator
 : FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted
 : GOVERNOR Electronic
 : OIL FILTER, ENGINE Spin-On Type
 : WET TYPE CYLINDER SLEEVES

FAN DRIVE {Horton Drivemaster Polar Extreme} Direct Drive Type, Two Speed, With Residual Torque Device for Disengaged Fan Speed

Includes

: FAN Nylon

RADIATOR Aluminum, Cross Flow, Series System; 1228 SqIn Core and 648 SqIn Charge Air Cooler and With Transmission Oil Cooler

FEDERAL EMISSIONS EPA, OBD and GHG Certified for Calendar Year 2014; N9 & N10 Engines

AIR CLEANER Single Element, with Integral Snow Valve and In-Cab Control

Includes

: GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted

THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for MaxxForce and Navistar post 2007 Emissions Electronic Engines

BLOCK HEATER, ENGINE (Phillips) 120 Volt/1250 Watt; With "Y" Cord From Socket in Standard Location, For a Dealer Installed Oil Pan Heater, With Extended Life Coated Metal/Plastic/Metal Material Oil Pan

Includes

: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door

Notes

: MPM material is single sheet composite with two layers of sheet metal sandwiching plastic material. MPM material has electro-deposition prime coat with powder coating for the final finish coat.

EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations

TRANSMISSION, AUTOMATIC {Allison 3000_RDS_P} 5th Generation Controls; Close Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction

TRANSMISSION SHIFT CONTROL {Allison} Bump Shifter Type; for Allison 3000 & 4000 Transmission

Description

TRANSMISSION TCM LOCATION Located Inside Cab

SHIFT CONTROL PARAMETERS Allison Performance Programming in Primary and Allison Economy Programming in Secondary

AXLE, REAR, TANDEM {Meritor RT-46-164EH} Single Reduction, Standard Width, 46,000-lb Capacity, With Driver Controlled Locking Differential in Forward Rear and Rear-Rear Axle and 200 Wheel Ends . Gear Ratio: 6.14

Includes

: POWER DIVIDER LOCK Electric over Air Operated, Cab Control with Indicator Light
: REAR AXLE DRAIN PLUG (2) Magnetic, For Tandem Rear Axle

Notes

: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.
: When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance

SUSPENSION, REAR, TANDEM {Hendrickson HMX-460-54} Walking Beam Type 54" Axle Spacing; 46,000-lb Capacity, With Rubber End Bushings, Transverse Torque Rods, Less Shock Absorbers

Includes

: CROSSMEMBER, SUSPENSION Stamped Steel Double Dogbone

Notes

: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.

SUSPENSION/REAR-AXLE IDENTITY for Meritor Tandem Rear Axles With Bar-Pin Beam Attachment Type Suspensions

FUEL/WATER SEPARATOR with Thermostatic Fuel Temperature Controlled Electric Heater, and Filter Restriction/Change Indicator, Includes Standard Equipment Water-in-Fuel Sensor

FUEL TANK Top Draw; D Style, Non Polished Aluminum, 50 U.S. Gal., 189 L Capacity, 16" Tank Depth, with Quick Connect Outlet, Mounted Left Side, Under Cab

DEF TANK 7 U.S. Gal. 26.5L Capacity, Frame Mounted Outside Left Rail, Under Cab

CAB Conventional

Includes

: ARM REST (2) Molded Plastic; One Each Door
: COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window
: CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel
: DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted
: GLASS, ALL WINDOWS Tinted
: GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side
: GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side
: INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color
: STEP (4) Two Steps Per Door

GAUGE CLUSTER English With English Electronic Speedometer

Includes

: GAUGE CLUSTER (6) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level
: ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout
: WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)

GAUGE, TEMPERATURE, AMBIENT Sensor Wiring with Display Unit Mounted in Cluster

GAUGE, OIL TEMP, ALLISON TRAN

IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

GAUGE, DEF FLUID LEVEL

Description

SEAT, DRIVER (National 2000) Air Suspension, High Back With Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, With 2 Position Front Cushion Adjust, -3 to +14 Degree Angle Back Adjust

Includes

: SEAT BELT 3-Point, Lap and Shoulder Belt Type

SEAT, PASSENGER (National) Non Suspension, High Back With Integral Headrest, Vinyl, With Fixed Back, With Under Seat Storage

MIRRORS (2) (Lang Mekra) Rectangular, 7.44" x 14.84" & 7.44" sq. Convex Both Sides, 102" Inside Spacing, Breakaway Type, Heated Heads Thermostatic Controlled, Black Heads, Brackets and Arms

WINDSHIELD Heated, Single Piece

HEATER (Blend-Air) with Defroster

Includes

: HEATER HOSES Premium

: HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps

INSTRUMENT PANEL Center Section, Flat Panel

HVAC FRESH AIR FILTER

STORAGE POCKET, DOOR Molded Plastic, Full Width; Mounted on Passenger Door

CAB INTERIOR TRIM Deluxe

Includes

: "A" PILLAR COVER Molded Plastic

: CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering

: CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and CB Radio Pocket

: DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors

: FLOOR COVERING Rubber, Black

: HEADLINER Soft Padded Cloth

: INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section

: STORAGE POCKET, DOOR (1) Molded Plastic, Full-Length; Driver Door

: SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console

CAB REAR SUSPENSION Air Bag Type

WHEEL, SPARE, DISC 22.5" Painted Steel, 10 Stud (285.75MM BC Hub Piloted) 9.00 DC Rim

WHEELS, FRONT DISC; 22.5" Painted Steel, 5 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 9.00 DC Rims; With .500" Thick Disc, Non-Standard Offset and Steel Hubs

Includes

: PAINT IDENTITY, FRONT WHEELS White

Notes

: Aluminum Wheels not Painted or Coated

: Compatible Tire Sizes: 12R22.5, 295/75R22.5, 295/80R22.5, 315/80R22.5

WHEELS, REAR (Accuride) DUAL DISC; 22.5" Painted Steel, 5 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With .472" Thick Increased Capacity Disc and Steel Hubs

Includes

: PAINT IDENTITY, REAR WHEELS White

Notes

: Compatible Tire Sizes: 11R22.5, 12R22.5, 255/70R22.5, 255/80R22.5, 265/75R22.5, 275/70R22.5, 275/80R22.5, 295/75R22.5, 295/80R22.5

PAINT IDENTITY, FRONT WHEELS Disc Front Wheels; With Vendor Applied White Powder Coat Paint

Description

PAINT IDENTITY, REAR WHEELS Disc Rear Wheels; With Vendor Applied White Powder Coat Paint

(8) TIRE, REAR 12R22.5 G622 RSD (GOODYEAR) 482 rev/mile, load range H, 16 ply

(2) TIRE, FRONT 315/80R22.5 G751 MSA DURASEAL (GOODYEAR) 484 rev/mile, load range L, 20 ply

Cab schematic 100GM

Location 1: 4641, Yellow (Custom)

Chassis schematic N/A

Services Section:

WARRANTY Standard for Paystar 5000, and Workstar 7500/7600, Effective with Vehicles Built January 2, 2014 or Later, CTS-2003X

SERVICES, TOWING {Navistar} Service Call to 24-Month/Unlimited Mileage to the Nearest Navistar Dealer for Navistar Warrantable Failure as Contract Defined; Includes Engine Failure if Supplier Declines Tow Coverage & ESC Supplied thru Navistar; \$550 (USA) Maximum Benefit per Incident

MHQ EQUIPMENT

EQUIPMENT SPECIFICATIONS FOR HEAVY CONSTRUCTION 14' DUMP TRUCK FOR THE CITY OF NEWTON

DUMP BODY:

The dump body required under these specifications shall be constructed of grade 50 hi-tensile steel. The unit shall consist of a heavy duty body, hydraulic hoist, cab shield, safety accessories and all other components necessary to make up a complete operating unit. The body, hydraulic hoist and cylinder are all to be manufactured by the same company. Hoist to be class 80 NTEA rated twin arm underbody design (scissor or telescopic hoists are not acceptable).

MINIMUM BODY DIMENSIONS:

YES/NO

- ☐ LONGSILLS: 7" X 12.5# STRUCTURAL I-BEAM
- ☐ CROSSMEMBERS: 4" X 7.7# STRUCTURAL CHANNEL SET ON 12" CENTERS
- ☐ INSIDE LENGTH: 14'
- ☐ INSIDE WIDTH: 88"
- ☐ OVERALL WIDTH: 100"
- ☐ SIDE HEIGHT: 38"
- ☐ FRONT HEIGHT: 60"
- ☐ END HEIGHT: 46"
- ☐ GATE HEIGHT: 46"
- ☐ CAPACITY: 15 CUBIC YARDS WATER LEVEL
- ☐ CAB SHIELD: FULL (MINIMUM 48") EXTENSION OVER CAB

MINIMUM BODY CONSTRUCTION:

The sides, front, gate and cab shield shall all be constructed of 3/16" Hi-Tensile steel. The sides shall have a formed dirt shedding bottom rub rail, horizontal rail, and boxed top rail. The floor shall be 1/4" AR450 Hardox steel. Sander tie down points shall be provided on the sides. There shall be four side braces per side. There shall be 10" wide front corner posts. 15" wide rear corner posts are to be full depth. A 10" full depth rear bolster will be included. Every cross member shall be gusseted to the longsills. Continuous welding is required (skip welding or caulking are not acceptable).

Meets above specifications **yes** **no**

Exceptions _____

TAILGATE:

The tailgate shall have full perimeter box bracing with two intermediate vertical braces and two intermediate horizontal braces. Nine panel double acting gate with two sets of banjo plates and long chains to allow gate to lie down horizontal with floor. Heavy duty 1-1/4" flame cut top hardware with grease fittings. Air operated tailgate as well as mechanical tailgate release handle located at front left corner of body. Tailgate release rod to run through gussets at every cross member and be adjustable at rear cross shaft. 3/8" spreader chains to be bright zinc plated steel covered with Naltex protective covering. Double acting barn door tail gate

Meets above specifications **yes** **no**

Exceptions _____

MINIMUM HOIST REQUIREMENTS:

The hoist is to be double acting with an NTEA Class 80 rating and 29 ton capacity at 2,000 PSI hydraulic pressure. The cylinder shall have a 2-1/2" chrome plated piston rod with replaceable packing. The bottom cylinder attaching pin shall be 2" diameter. Cylinder bore is to be a minimum of 8" with a stroke of at least 34". Hoist subframe shall be full length severe duty unitized construction with 5" x 1/4" formed long members (cast or tubing will not be acceptable). The subframe is to be fabricated from A572 grade 50 High Tensile steel. There are to be four (6) 4140 grade weldable mounting castings. Dual cast steel I-Beam lift arms and heavy duty cast steel torque arms shall be provided. Lift link pins shall be 1-1/2" OD. One OSHA approved body prop. 2" minimum rear hinge pins. Minimum dump angle of 50-degrees. Body and hoist must be the product of one (1) manufacturer to preclude any problems of mating and warranty.

Meets above specifications yes no

Exceptions _____

PAINT:

Factory shot blasted, epoxy primed with black powder coat sub finish. Finish coat to be painted black single stage urethane. Under body and chassis frame to be painted black.

Meets above specifications yes no

Exceptions _____

ACCESSORIES:

Electric back up alarm shall have a minimum decibel level of 97 dba. In cab body raised indicator light and audible alarm as required by OSHA. Mudflaps are to be installed front and rear of rear wheels. There shall be a 10" x 100" x 3/16" High-Tensile steel bolt on asphalt apron. An LED mounted roof beacon will be installed with branch guard. LED amber flasher and LED Stop/Tail/Turn lamps are to be provided and installed in the rear corner posts of the body. An electric automatic loadcover with aluminum arms and vinyl asphalt tarp will be installed. A 15-ton rated pintle hook with spring backing shall be installed to a 5/8" thick steel plate at the rear of the chassis. Two (2) D-rings and 7-pin trailer light plug will be included. Chassis manufacturer supplied glad hands shall be installed in the pintle plate. 10" tall steel channel side boards full length of body shall be installed and painted black.

Meets above specifications yes no

Exceptions _____

CENTRAL HYDRAULIC SYSTEM:

The central hydraulic system shall consist of a front mounted pump and chassis mounted valve. The pump shall be driven directly by the engine crankshaft of the chassis. There shall be a low hydraulic oil shutoff system which ceases the flow of oil to the valve and sets off an audible and visual alarm in the cab when a low oil situation occurs. A momentary override switch temporarily returns the hydraulic system to operation for equipment stowing and fault finding. The control valve shall be of mobile design to withstand exposure to de-icing chemicals and severe weather conditions. It shall be of cast iron construction-horizontally stackable and serviceable without disassembly. Sections for hoist and front plow shall be operated via

in-cab controls with marine grade stainless steel cables. The electric spinner and auger sections must be incorporated into the main valve assembly. The valve shall be assembled as a single unit and mounted in a sealed stainless steel enclosure. Multiple valve assemblies are unacceptable.

Valve Section Functions are to be as follows:

- DA Plow raise/lower
- DA Plow reverse (designed for locking pin plow)
- DA Hoist w/ 500 PSI Relief on Down Side
- Electric Conveyor
- Electric Spinner

A 35-gallon chassis mounted hydraulic oil reservoir shall be provided including internal return line filter and sight/temp gauge.

Pump, Valve, Spreader Control and Pre-Wet System must all be made by the same manufacturer to ensure complete system compatibility.

Meets above specifications yes no

Exceptions _____

SPREADER CONTROL:

The CAN Bus spreader control system shall be ground speed orientated to maintain a pre-determined application rate regardless of vehicle speed. Control shall be by microprocessor for high control accuracy with the outputs being current compensated. The controller must be modular in design to allow flexibility in mounting. The display will be a glass/film/glass design and have on screen touch controls. The screen will offer an adjustable brightness. The display must include a 1.5 watt speaker that announces rate change, pause and blast. The controller must be capable of operating in Manual, Automatic (Closed Loop), Open Loop, Ground Speed Triggered and 12V triggered. The controller must be capable of operating Auger/Conveyor, Spinner, Pre-Wet and Anti-Ice. The Operation selection is key coded USB drive. The Controller is to offer 4 different Granular, Pre-Wet, Anti-Ice Materials each with 9 programmable rates. It must be capable of operating the Spinner, Auger/Conveyor, Pre-Wet, and Anti-Ice all at the same time.

THE CONTROLLER MUST OFFER THE FOLLOWING FEATURES:

TEMPERATURE READ BACK AND PRE-WET TEMPERATURE COMPENSATION:

The controller must be capable of reading and logging road temperature via an external sensor (Control Products or Sprague Road Watch) and Temperature Compensation for Pre-Wet Control.

GPS COMPATIBLE:

The controller must be capable of supplying logging information to an external GPS system.

ONBOARD WI-FI AND GPS INFO:

System must offer onboard wi-fi for optional data downloading and uploading from optional Desktop Software

AUTO NULLING:

When in closed loop granular or liquid the controller must be capable of doing an Auto Null for the auger/conveyor and the liquid hydraulic valve sections. Manual Nulling must also be available for all circuits.

SYSTEM PROGRAMMING:

Programming of the spreader control must be able to be done on screen with easy menus or through the desktop/laptop computer and transferred via keyed USB Drive.

TRIP SUMMARY INFORMATION:

The driver must be able to access a trip summary screen that will show miles traveled and material spread quantities.

ON SCREEN ERROR CODE LOG:

An on screen error log must be available without any external devices such as keys or computers.

DATA LOGGING:

The controller must be able to provide information that is event based such as: Event time, Date, Material set-point and usage amounts, Spinner set-point, Pre-Wet set-point and usage amounts, Blast distance and amount used, Pause distance, Gate Setting, and Road Temperature. All the information will be transferred from the spreader control to a desktop/laptop computer USB drive. All data logging information must be capable of being customized and exported. Summation reports are not acceptable.

SOFTWARE UPDATES:

The spreader control software must be able to be upgraded via desktop/laptop computer. EPROM changes are not acceptable.

The spreader control must be made by the same manufacturer as the pump and valve to insure complete system compatibility.

Meets above specifications **yes** **no**

Exceptions _____

CONVEYOR RETURN OIL VARIABLE RATE PRE-WETTING SYSTEM:

The following specification will describe a calcium chloride pre-wetting system. This system shall be mounted on the snow and ice control vehicle to allow operators to apply liquids directly on to granular material without over spray on the truck and equipment. The system is to be powered by the return oil from the conveyor line of the hydraulic system. The system utilizes a hydraulic proportional flow control valve, which allows the driver to select variable rates that were preset on the controller. Calcium chloride output shall be between 0.5 gpm and 9.0 gpm.

The pre-wetting system will have a self-contained power pack, assembled with weather resistant components and anti-seize applied to all fasteners. Weatherproof enclosure is manufactured of stainless steel material with heavy duty mounting brackets.

The proportional valve assembly will divert between 0% to 100% of hydraulic oil to the motor allowing for pinpoint rate adjustment. System output will give a liquid to granular rate depending on application and vehicle speed. The system incorporates a gear pump which has good wearing properties, for worry free use. It is a fixed displacement pump, which has been coated to resist corrosion and chemicals. Low material output will be monitored via the controller, which will give an audible and visual warning to the driver. There shall also be installed a relief valve into the output of the pump in order to protect the lines and pump against clogging of nozzles and system failures. The prewet system will be activated and controlled via a third and integrated knob on the spreader controller.

Meets above specifications **yes** **no**

Exceptions _____

CUSTOM TRUCK/PLOW MOUNT ATTACHMENT HITCH:

The custom truck/plow attachment shall be manufactured by a recognized snow equipment fabrication shop that has been fabricating plow hitches for a minimum of twenty years. The hitch shall include 1/2" thick side plates reinforced and bolted as far back on the truck frame as feasible. The vertical riser shall be a minimum of 4" x 4" x 3/8" tubing. The horizontal member to which the base of the lift cylinder pins shall be a 4" x 4" x 1/2" angle boxed with a 3/8" x 5" flat bar. The lift cylinder shall be double acting with a 4" bore and 10" stroke, chrome plated piston rod, adjustable chevron type packings, and a wiper to clean the piston as it retracts into the cylinder. The bottom of the hitch, behind the connecting points for the push frame, shall be adequately reinforced to transmit all plowing forces to the frame of the truck. Hitch is to be tilt over type (stationary grill required on chassis) so as not to interfere with the opening of the chassis tilt hood. The hitch is to have push lugs at two heights set on 21" and 30 1/2" centers for attachment of the plow. The pushlugs shall be supported by a full width 4" x 8" x 3/4" angle iron which also joins the uprights at the bottom. Halogen plow lights, directional lights with dash mounted switch are to be installed.

Meets above specifications yes no

Exceptions _____

LIFT CYLINDER:

The lift cylinder shall be 4" x 10" DA (double acting).

Meets above specifications yes no

Exceptions _____

SAE "B" 2-BOLT BRACKET:

The pump mounting bracket shall be from not less than 3/8" and 1/2" plate steel. It shall span the width of the truck frame/hitch, and shall be fabricated to accommodate an SAE "B" 2 bolt pump flange.

Meets above specifications yes no

Exceptions _____

PUSH CENTERS 21" and 30-1/2":

The bottom horizontal member shall be fitted with eight (8) 1/2" thick plow attaching lugs, which offer two push height selections on 21" and 30-1/2" centers via two (2) 1-1/4" pins.

Meets above specifications yes no

Exceptions _____

LIFT GROUP:

The lift group consists of a grab loop which is secured to the lift yoke with no less than a 5/8" round pin anchor shackle.

Meets above specifications yes no

Exceptions _____

HOSE CONNECTING BRACKET WITH RESTRICTOR:

The hose connecting bracket shall consist of a mounting plate cut from 8 gauge steel sheet with (2) holes for attaching the hose adapters, flow restrictor and quick disconnects. Rubber dust covers shall be provided to protect the quick disconnects when not in use.

Meets above specifications yes no

Exceptions _____

FRONT PLOW MOLDBOARD:

The moldboard shall be 10' long overall and not less than 42" high at inside of top radius. The moldboard shall have an integral snow deflector that extends a minimum of 12" fore of the cutting edge. The moldboard shall be brake formed (not rolled) from not less than 8 gauge H.R.M.S. sheet. It shall include an integral formed channel at the leading top edge of the snow deflector to provide rigidity. The moldboard shall be supported by not less than (8) 1/2" thick vertical ribs, (6) of which serve as pushframe connection points. Additional moldboard support shall be provided by a lower horizontal member from not less than 5" x 5" x 1/2" structural angle. This angle shall also have hinge lugs welded to it and serve as the trip edge attachment member. The trip edge shall be fabricated from not less than 4" x 4" x 3/4" structural angle and shall be punched with 11/16" diameter holes to AASHTO standards, to accommodate either single or multiple cutting edges. The trip edge angle shall be reinforced with a minimum of (8) 1/2" triangular gussets and have hinge lugs welded to the top of it. The trip edge shall attach to the moldboard with not less than 1-1/2" diameter hot rolled steel bar. The steel bar shall slide through the hinge lugs and through (5) 7/8" diameter x 3-3/4" x 17-3/8" torsion springs. Each torsion spring shall be capable of preload adjustment.

Meets above specifications yes no

Exceptions _____

AR CUTTING EDGE (12" PUNCHED):

The cutting edge shall be 1/2" x 6" x 120" from SAE/AISI C1085 steel, and be center punched with 11/16" square holes on 12" centers to AASHTO standards. It shall attach to the moldboard with not less than 5/8" grade 5 carriage bolts with locknuts.

Meets above specifications yes no

Exceptions _____

TWIN CYLINDER LOCKING PIN POWER REVERSING PUSHFRAME:

The reversing pushframe shall consist mainly of two (2) truss members and a main drive frame angle. The truss members shall be from 4" x 3" x 3/8" angle and the main drive angle shall be from 6" x 4" x 1/2" angle. Four (4) additional pieces of 4" x 3" x 1/2" angle shall be welded perpendicular to the main drive angle connecting with the truss members so as to form a rigid structure, two (2) of which serve as support for the trip mechanism. Three (3) sets of 1/2" thick lugs shall be provided for pinning the moldboard to the pushframe over an 80" span. Three (3) 1-1/4" cold rolled steel pins shall connect the moldboard to the pushframe. A locking plate cut from 1/2" steel plate indexed with seven (7) total locking positions shall be welded to

the two (2) truss members. The pushframe shall be capable of being locked into any of these positions. (0 to 35 degrees to right or left of center).

The pivot frame shall consist of a main drive member of 7" x 4" x 3/8" structural tube with two full length gussets of 3/8" plate on each side. Locking and unlocking is accomplished by a sliding drive member of 6" x 3" x 1/4" tube fitted inside the 7" x 4" x 3/8" structural tube retained by a 1" cold rolled steel pin. A 9/16" diameter alloy wire extension spring is used to pull the main drive member, containing a 1-1/4" x 2" Nicroloy removable locking pin, into any one of seven (7) index positions cut into the aforementioned index guide with the above reversing frame. Additional locking force is applied by the pushing action of the plow. Both unlocking and reversing functions are provided by two (2) 3" x 16" stroke single acting hydraulic cylinders. A swivel support plate from 3/4" steel plate shall be welded at the rear of the main drive member tube. The pivot frame shall pin to the reversing frame with a 1-15/16" cold rolled steel pin through a 3-1/2" OD x 3/4" wall tube. Provisions shall be made for oscillation so as to allow the plow to follow the contour of the road without exceeding 20° to the left or to the right.

Meets above specifications **yes** **no**

Exceptions _____

BRACE ARMS:

The arm assemblies are pin connected under double shear load via a 1/2" thick connecting rib at the moldboard, and (1) 1/2" thick connecting lug at the reversing frame. Each arm assembly shall be connected to the moldboard with no less than a 3/4" bolt and to the pushframe with no less than a 3/4" pin. Brace arms shall be constructed from no less than the following; (2) 1/2" thick bars and (1) 5/8" thick bar. The arms shall also serve the dual purpose of allowing adjustment of the moldboard cutting edge angle from 25° from vertical to 10° from vertical.

Meets above specifications **yes** **no**

Exceptions _____

LIFT LEVELING DEVICE (DEAD SHEAVE):

The lift leveling device shall consist of a wire rope assembly that is secured to the pushframe. The 1/2" diameter stainless steel wire rope shall be wrapped one time around a dead sheave assembly and be pre-stretched prior to fabrication. The dead sheave assembly shall attach to the lifting chain with no less than a 3/8" midlink and to the pushframe with 1/2" round pin anchor shackles.

Meets above specifications **yes** **no**

Exceptions _____

30 1/2" SWIVEL:

The rear of the plow drive frame shall be fitted with a swivel bar. It shall oscillate about a 1-1/2" grade 5 bolt allowing the plow to follow the contour of the plowing surface. It shall consist of a 3/4" thick horizontal plate equipped with two (2) drive ears fabricated from 1-1/4" thick plate on 30-1/2" centers, which include 1-5/16" diameter drive pin holes. The drive ears are constructed to pin to corresponding attaching lugs at the bottom of the truck mounted attachment hitch.

Meets above specifications yes no

Exceptions _____

MOLDBOARD SHOE (10°):

Moldboard shoe shall be manufactured from a wear plate of 1-1/2" steel plate. A mounting plate and gussets from 1/2" plate steel shall be welded to the top of the wear plate to allow a 10° attack angle when the shoe is flat on the ground. Moldboard shoe shall be secured with (2) 5/8" grade 5 carriage bolts and locknuts. Two (2) moldboard shoes shall be provided.

Meets above specifications yes no

Exceptions _____

CURB SHOE:

Curb shoe manufactured from 5/8" steel plate welded to a piece of 2-1/8" cold rolled steel. Curb shoe shall be secured with (2) 5/8" grade 5 bolts, washers and locknuts. Two (2) curb shoes shall be provided.

Meets above specifications yes no

Exceptions _____

WARRANTY:

The equipment being bid will be warranted from defects in components, materials and workmanship for a period of one year from the date the truck is put into service. The successful bidder shall have a factory authorized service and parts facility within 30 miles of the end user's garage. The distributor's facility must have an adequate stock of parts and technicians trained to perform work on the equipment bid.

Meets above specifications yes no

Exceptions _____